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Approved for use through 9/30/00. OMB 0651-0032
Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

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**UTILITY
PATENT APPLICATION
TRANSMITTAL**

(Only for new nonprovisional applications under 37 CFR 1.53(b))

Attorney Docket No.

SJO920000145US1

Total Pages

34

First Named Inventor or Application Identifier

Tsann Lin

Express Mail Label No.

ET155169940US

APPLICATION ELEMENTS

See MPEP chapter 600 concerning utility patent application contents.

1. ☒ Fee Transmittal Form
(Submit an original, and a duplicate for fee processing)2. ☒ Specification (Total Pages) 25
(Preferred arrangement set forth below)

- Descriptive title of the Invention
- Cross References to Related Application
- Statement Regarding Fed sponsored R & D
- Reference to Microfiche Appendix
- Background of the Invention
- Brief Summary of the Invention
- Brief Description of the Drawings (if filed)
- Detailed Description
- Claim(s)
- Abstract of the Disclosure

3. ☒ Drawing(s) (35 USC 113) (Total Pages) 74. Oath or Declaration (Total Pages) 2

- a. ☒ Newly executed (original or copy)
- b. ☐ Copy from a prior application (37 CFR 1.63(d))
(for continuation/divisional with Box 17 completed)
(Note Box 5 below)
- i. ☐ **DELETION OF INVENTOR(S)**
Signed statement attached deleting inventor(s) named
in prior application, see 37 CFR 1.63(d)(2) and
1.33(b).

5. ☐ Incorporation by Reference (useable if Box 4b is checked)
The entire disclosure of the prior application, from which a copy
of the oath or declaration is supplied under Box 4b is considered
as being part of the disclosure of the accompanying application
and is hereby incorporated by reference therein.6. ☐ Microfiche Computer Program (Appendix)7. Nucleotide and/or Amino Acid Sequence Submission (if applicable,
all necessary)

- a. ☐ Computer Readable Copy
- b. ☐ Paper Copy (identical to computer copy)
- c. ☐ Statement verifying identity of above copies

ACCOMPANYING APPLICATION PARTS8. ☒ Assignment Papers (cover sheet & document(s))9. ☐ 37 CFR 3.73(b) Statement ☒ Power of Attorney
(when there is an assignee)10. ☐ English Translation Document (if applicable)11. ☒ Information Disclosure ☒ Copies of IDS
Statement (IDS)/PTO-1449 Citations12. ☐ Preliminary Amendment13. ☒ Return Receipt Postcard (MPEP 503)
(Should be specifically itemized)14. ☐ Small Entity ☐ Statement filed in prior application,
Statement(s) Status still proper and desired15. ☐ Certified Copy of Priority Document(s)
if foreign priority is claimed16. ☒ Other: Express Mail Certificate17. If a **CONTINUING APPLICATION**, check appropriate box and supply the requisite information:☐ Continuation ☐ Divisional ☐ Continuation-in-part (CIP) of prior application No.:**18. CORRESPONDENCE ADDRESS**

- ☐ Customer Number or Bar Code Label _____
- ☐ Or Correspondence address below

NAME

Brian C. Kunzler

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Assignee Name: INTERNATIONAL BUSINESS MACHINES CORPORATION**Assignee Residence:** Armonk, New York

Burden Hour Statement: This form is estimated to take 0.2 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, Patent and Trademark Office, Washington, D.C. 20231.

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FEE TRANSMITTAL

Note: Effective October 1, 1997.
Patent fees are subject to annual revision.

Complete If Known

Application Number Not yet assigned

Filing Date January 4, 2002

First Named Inventor Tsann Lin

Group Art Unit

Examiner Name

TOTAL AMOUNT OF PAYMENT \$ 1008.00

Attorney Docket Number SJO920000145US1

METHOD OF PAYMENT (check one)

1. ☒ The Commissioner is hereby authorized to charge indicated fees and credit any over payments to:

Deposit Account Number: 09-0466

Deposit Account Name: IBM CORPORATION

- ☒ Charge Any Additional Fee Required Under 37 CFR 1.16 and 1.17 ☐ Charge the Issue Fee In 37 CFR at the Mailing of the Notice of Allowance

☐ Payment Enclosed:☐ Check ☐ Money Order ☐ Other**FEE CALCULATION****FILING FEE**

Large Entity		Small Entity		Fee Description	Fee Paid
Fee Code	Fee (\$)	Fee Code	Fee (\$)		
101	740	201	370	Utility filing fee	740
106	330	206	165	Design filing fee	
107	510	207	255	Plant filing fee	
108	740	208	370	Reissue filing fee	
114	160	214	80	Provisional filing fee	

SUBTOTAL (1)**\$ 740****2. CLAIMS**

Large Entity		Small Entity		Fee Description	Fee Paid
Fee Code	Fee (\$)	Fee Code	Fee (\$)		
101	740	201	370	Utility filing fee	740
106	330	206	165	Design filing fee	
107	510	207	255	Plant filing fee	
108	740	208	370	Reissue filing fee	
114	160	214	80	Provisional filing fee	

SUBTOTAL (1)**\$ 740**

Large Entity		Small Entity		Fee Description	Fee Paid
Fee Code	Fee (\$)	Fee Code	Fee (\$)		
103	18	203	9	Claims in excess of 20	
102	84	202	42	Independent claims in excess of 3	
104	280	204	140	Multiple dependent claim	

SUBTOTAL (2)**\$ 228****FEE CALCULATION (continued)****3. ADDITIONAL FEES****Large Entity****Small Entity**

Fee Code	Fee (\$)	Fee Code	Fee (\$)	Fee Description	Fee Paid
105	130	205	65	Surcharge - late filing fee or oath	
127	50	227	25	Surcharge - late provisional filing fee or cover sheet	
139	130	139	130	Non-English specification	
147	2520	147	2520	For filing a request for reexamination	
112	920*	112	920*	Requesting publication of SIR prior to Examiner action	
113	1840*	113	1840*	Requesting publication of SIR after Examiner action	
115	110	215	55	Extension for reply within first month	
116	400	216	200	Extension for reply within second month	
117	920	217	460	Extension for reply within third month	
118	1440	218	720	Extension for reply within fourth month	
128	1960	228	980	Extension for reply within fifth month	
119	320	219	160	Notice of Appeal	
120	320	220	160	Filing a brief in support of an appeal	
121	280	221	140	Request for oral hearing	
138	1510	138	1510	Petition to institute a public use proceeding	
140	110	240	55	Petition to revive - intentional	
141	1280	241	640	Petition to revive - unintentional	
142	1280	242	640	Utility issue fee	
143	460	243	230	Design issue fee	
144	620	244	310	Plant issue fee	
122	130	122	130	Petitions to the Commissioner	
123	50	123	50	Petitions related to provisional applications	
126	180	126	180	Submission of Information Disclosure Stmt	
581	40	581	40	Recording each patent assignment per property (times number of properties)	40
146	740	246	370	Filing a submission after final rejection (37 CFR 1.129(a))	
149	740	249	370	For each additional invention to be examined (37 CFR 1.129(b))	

Other fee (specify) _____

*Reduced by Basic Filing Fee

SUBTOTAL (3)**\$ 40****SUBMITTED BY****Complete (if applicable)**

Typed or Printed Name Brian C. Kunzler

Reg. Number 38,527

Signature

Date

Jan 4, 2002

Deposit Account User ID

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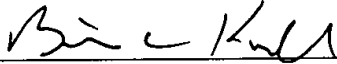
CERTIFICATE OF MAILING BY "EXPRESS MAIL"

"Express Mail" Mailing Label No.: ET155169940US

Date of Deposit: January 4, 2002

I hereby certify that this patent application in the name of Tsann Lin and Daniele Mauri
for A SPIN-VALVE SENSOR WITH PINNING LAYERS COMPRISING MULTIPLE
ANTIFERROMAGNETIC FILMS, together with the drawings, a Declaration, Power of
Attorney, and Petition, an Assignment and Recordation Form Cover Sheet, Information
Disclosure Statement, PTO Form 1449, and Copies of Cited References are being deposited with
the United States Postal Service "Express Mail Post Office to Addressee" service under 37
C.F.R. § 1.10 on the date indicated above in an envelope addressed to Box Patent Application,
Assistant Commissioner for Patents, Washington, D.C. 20231.

Respectfully submitted,



Brian C. Kunzler
Reg. No. 38,527
Attorney for Applicant

Date: January 4, 2002

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